

CLAIMS:

What is claimed is:

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1. A mercury-free, arc vessel having an aspect ratio greater than 5 and containing a fill comprised of iodides selected from the group consisting essentially of sodium, scandium, lithium, cesium and a buffer gas selected from the group consisting of xenon, argon and krypton.

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2. The arc vessel of Claim 1 wherein the vessel is fused silica.

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3. A mercury-free, metal halide lamp comprising; an outer envelope containing an atmosphere selected from the group consisting of vacuum and nitrogen; and an arc discharge vessel mounted therein; said vessel having an aspect ratio greater than 5 and containing a fill comprised of iodides selected from the group consisting of sodium, scandium, lithium or cesium and a buffer gas of from about 50 torr to 500 torr selected from the group consisting of xenon, argon and krypton.

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4. The lamp of Claim 3 wherein arc discharge vessel is fused silica.

5. The lamp of Claim 3 wherein said lamp is operated by a ballast supplying power to operate said lamp between approximately 250 watts and 400 watts.